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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/929,109	08/15/2001	Nobuo Haino	041465-5117	8427
9629	7590	12/29/2005	EXAMINER	
MORGAN LEWIS & BOCKIUS LLP 1111 PENNSYLVANIA AVENUE NW WASHINGTON, DC 20004			CHOWDHURY, NIGAR	
			ART UNIT	PAPER NUMBER
			2616	
DATE MAILED: 12/29/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/929,109

Applicant(s)

HAINO ET AL.

Examiner

Nigar Chowdhury

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) ____ is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08/15/01 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 11/21/01, 5/29/03, 7/01/05
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Drawings

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: In page 35 line 27, reference character "Sm" is not described in the figure. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the

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applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-4, 7-14 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by U.S. patent No. 6148140 by Tomoyuki Okada.

Okada shows a recording apparatus for recording information in a recordable recording medium in conformity to recording format for a reproduction only (See Col. 76 line 37-42) recording medium that includes all the limitations recited in claim 1.

- Encoding device (See Fig. 17(2), Col. 19 line 2-5 and Col. 35 line 8-10. In Fig. 17 encoding device 2 encodes the signal information using fixed-length encoding to a recording format) for encoding information.
- A converting device (See Fig. 17 (3, 7), Col. 35 line 21-28. Encoder 2 encodes the signal to VOBs and stores in access unit 3. Access unit 3 process the VOBs to recording format) converts the encoded information to recordable information.
- A recording device (See Fig. 17, Col. 34 line 51. DVD recorder 70 records recordable information) for recording the information.
- Converting device comprises:
 - A unit information forming device (See Fig. 17 (3, 7), Col. 34 line 62-65. Encoded unit information after encoded by encoder 2 records in a recordable medium becomes a constant unit time

- corresponding to encoded rate. Constant unit time is met by the fixed-length encoding of the VOBU disclosed in Col. 19 line 2-5.)
- An upper unit information forming device (See Fig. 4A, 17, Col. Col. 35 line 8-10, Col. 14 line 24-29, Col. 17 line 25. Encoder encodes VOBs from video signal and VOBs records into the disk or recording medium. Fig. 4A shows composition of VOB, which is composed of polarities of VOBU. These "polarities" is a constant number corresponding to unit time.) to form VOBs.
 - Address information generating device (See Fig. 17, 39A, 39B, 71, Col. 26 line 39-45, Col. 53 line 1-8, Col. 80 line 28-42. In Fig. 17 (2, 3, 7) generates VOBU, which include address information and records in a recording medium. Fig. 39A and Fig. 39B shows the detailed data construction of the file identification descriptors for directories and files in the various directories. In Fig. 71 shows the size of the VOBU and the reproduction period or each VOBU. It also shows the address information for to improve the data accessing ability.)
 - Format information generating device (See Fig. 17, 12A, Col. 26 line 39-45. Fig. 12A shows a time map table of VOB. VOBU composes the VOB and to improve accessing capabilities generates address information is contained in unit information.)

Claim 2 limits claim 1 by including a address information generating device to generate an address information in one unit information to indicate a recording position on the recordable recording medium of other unit information to be reproduced back and forth of one unit information (See Col.58 line 41-46). Recording information which is recorded in the recordable recording medium, can be reproduced back and forth by the "rewind" and "fast forward" operation).

In claim 3, applicant introduces a recording apparatus to the combination to claim 1.

- A recording format is a recording format in conformity to DVD video standard (See Fig. 17 (70), Col. 34 line 51. Recording format is a DVD recorder.).
- A recordable recording medium is a DVD-R (See Col. 1 line 11. A recordable recording medium is an optical disc.).
- Unit information is a VOB in recording format (See Col. 34 line 62-65. After encoding the unit information, VOB is recorded in a recorder)
- Upper unit information is a VOB in recording format (See Col. 35 line 8-10.)
- Address information comprises a navigation pack in recording format (See Fig. 6D, Co. 18 line 30-34. VOB composed of packs. Pack header is a head of the VOB includes the address information of the unit information.)

In claim 4, applicant introduces a recording apparatus to the combination to claim 2.

- A recording format is a recording format in conformity to DVD video standard (See Fig. 17 (70), Col. 34 line 51. Recording format is a DVD recorder.).
- A recordable recording medium is a DVD-R (See Col. 1 line 11. A recordable recording medium is an optical disc.).
- Unit information is a VOB in recording format (See Col. 34 line 62-65. After encoding the unit information, VOB is recorded in a recorder)
- Upper unit information is a VOB in recording format (See Col. 35 line 8-10.)
- Address information comprises a navigation pack in recording format (See Fig. 6D, Co. 18 line 30-34. VOB composed of packs. Pack header is a head of the VOB includes the address information of the unit information.)

Okada shows a recording method for recording information in a recordable recording medium in conformity to recording format for a reproduction only (See Col. 76 line 37-42) recording medium that includes all the limitations recited in claim 7.

- Encoding information (See Fig. 17(2), Col. 19 line 2-5 and Col. 35 line 8-10. In Fig. 17 encoding device 2 encodes the signal information using fixed-length encoding to a recording format).
- A converting information (See Fig. 17 (3, 7), Col. 35 line 21-28. Encoder 2 encodes the signal to VOBs and stores in access unit 3. Access unit 3 process the VOBs to recording format) is converts by the converting device and generated converting encoded information is records in a recordable recording medium.
- Recording information (See Fig. 17, Col. 34 line 51. DVD recorder 70 records recordable information) is recorded in a recording medium in a recording format.
- Process of converting generated encoding infromation comprises:
 - Forming unit information (See Fig. 17 (3, 7), Col. 34 line 62-65. Encoded unit information after encoded by encoder 2 records in a recordable medium becomes a constant unit time corresponding to encoded rate. Constant unit time is met by the fixed-length encoding of the VOBU disclosed in Col. 19 line 2-5.)
 - Forming an upper unit information (See Fig. 4A, 17, Col. Col. 35 line 8-10, Col. 14 line 24-29, Col. 17 line 25. Encoder encodes VOBs from video signal and VOBs records into the disk or recording medium. Fig. 4A shows composition of VOB, which is

composed of polarities of VOB. These "polarities" is a constant number corresponding to unit time.) to form VOBs.

- Generating address information (See Fig.17, 39A, 39B, 71, Col. 26 line 39-45, Col. 53 line 1-8, Col. 80 line 28-42. In Fig. 17 (2, 3, 7) generates VOB, which include address information and records in a recording medium. Fig. 39A and Fig. 39B shows the detailed data construction of the file identification descriptors for directories and files in the various directories. In Fig. 71 shows the size of the VOB and the reproduction period of each VOB. It also shows the address information for to improve the data accessing ability.)
- Generating format information (See Fig. 17, 12A, Col. 26 line 39-45. Fig. 12A shows a time map table of VOB. VOB composes the VOB and to improve accessing capabilities generates address information is contained in unit information.)

In claim 8, applicant introduces a recording method to the combination to claim 7.

- A recording format is a recording format in conformity to DVD video standard (See Fig. 17 (70), Col. 34 line 51. Recording format is a DVD recorder.).
- A recordable recording medium is a DVD-R (See Col. 1 line 11. A recordable recording medium is an optical disc.).

- Unit information is a VOB in recording format (See Col. 34 line 62-65. After encoding the unit information, VOB is recorded in a recorder)
- Upper unit information is a VOB in recording format (See Col. 35 line 8-10.)
- Address information comprises a navigation pack in recording format (See Fig. 6D, Co. 18 line 30-34. VOB composed of packs. Pack header is a head of the VOB includes the address information of the unit information.)

Claim 9 limits claim 7 by including an address information generating process to generate an address information in one unit information to indicate a recording position on the recordable recording medium of other unit information to be reproduced back and forth of present one unit information (See Col.58 line 41-46. Recording information which is recorded in the recordable recording medium, can be reproduced back and forth by the “rewind” and “fast forward” operation).

In claim 10, applicant introduces a recording method to the combination to claim 9.

- A recording format is a recording format in conformity to DVD video standard (See Fig. 17 (70), Col. 34 line 51. Recording format is a DVD recorder.).

- A recordable recording medium is a DVD-R (See Col. 1 line 11. A recordable recording medium is an optical disc.).
- Unit information is a VOB in recording format (See Col. 34 line 62-65. After encoding the unit information, VOB is recorded in a recorder)
- Upper unit information is a VOB in recording format (See Col. 35 line 8-10.)
- Address information comprises a navigation pack in recording format (See Fig. 6D, Co. 18 line 30-34. VOB composed of packs. Pack header is a head of the VOB includes the address information of the unit information.)

Okada shows a recording medium in which a recording control program is recorded capable of being read by a recording computer (See Fig. 17 (1), Col. 1 line 13) for functioning recording computer included in an information recording apparatus of recording information in a recordable recording medium in conformity to recording format for a reproduction only (See Col. 76 line 37-42), the recording control program causing the recording computer to function recording medium that includes all the limitations recited in claim 11.

- Encoding device (See Fig. 17(2), Col. 19 line 2-5 and Col. 35 line 8-10. In Fig. 17 encoding device 2 encodes the signal information using fixed-length encoding to a recording format) for encoding information.

- A converting device (See Fig. 17 (3, 7), Col. 35 line 21-28. Encoder 2 encodes the signal to VOBs and stores in access unit 3. Access unit 3 process the VOBs to recording format) converts the encoded information to recordable information.
- A recording device (See Fig. 17, Col. 34 line 51. DVD recorder 70 records recordable information) for recording the information.
- Converting device comprises:
 - A unit information forming device (See Fig. 17 (3, 7), Col. 34 line 62-65. Encoded unit information after encoded by encoder 2 records in a recordable medium becomes a constant unit time corresponding to encoded rate. Constant unit time is met by the fixed-length encoding of the VOBU disclosed in Col. 19 line 2-5.)
 - An upper unit information forming device (See Fig. 4A, 17, Col. Col. 35 line 8-10, Col. 14 line 24-29, Col. 17 line 25. Encoder encodes VOBs from video signal and VOBs records into the disk or recording medium. Fig. 4A shows composition of VOB, which is composed of polarities of VOBU. These "polarities" is a constant number corresponding to unit time.) to form VOBs.
 - Address information generating device (See Fig.17, 39A, 39B, 71, Col. 26 line 39-45, Col. 53 line 1-8, Col. 80 line 28-42. In Fig. 17 (2, 3, 7) generates VOBU, which include address information and records in a recording medium. Fig. 39A and Fig. 39B shows the

detailed data construction of the file identification descriptors for directories and files in the various directories. In Fig. 71 shows the size of the VOB and the reproduction period of each VOB. It also shows the address information for to improve the data accessing ability.)

- Format information generating device (See Fig. 17, 12A, Col. 26 line 39-45. Fig. 12A shows a time map table of VOB. VOB composes the VOB and to improve accessing capabilities generates address information is contained in unit information.)

In claim 12, applicant introduces a recording medium to the combination to claim 11.

- A recording format is a recording format in conformity to DVD video standard (See Fig. 17 (70), Col. 34 line 51. Recording format is a DVD recorder.).
- A recordable recording medium is a DVD-R (See Col. 1 line 11. A recordable recording medium is an optical disc.).
- Unit information is a VOB in recording format (See Col. 34 line 62-65. After encoding the unit information, VOB is recorded in a recorder)
- Upper unit information is a VOB in recording format (See Col. 35 line 8-10.)

- Address information comprises a navigation pack in recording format (See Fig. 6D, Co. 18 line 30-34. VOBUs composed of packs. Pack header is a head of the VOBUs includes the address information of the unit information.)

Claim 13 limits claim 11 by including an address information generating device to generate an address information in one unit information to indicate a recording position on the recordable recording medium of other unit information to be reproduced back and forth of present one unit information (See Col.58 line 41-46. Recording information which is recorded in the recordable recording medium, can be reproduced back and forth by the “rewind” and “fast forward” operation).

In claim 14, applicant introduces a recording method to the combination to claim 13.

- A recording format is a recording format in conformity to DVD video standard (See Fig. 17 (70), Col. 34 line 51. Recording format is a DVD recorder.).
- A recordable recording medium is a DVD-R (See Col. 1 line 11. A recordable recording medium is an optical disc.).
- Unit information is a VOBUs in recording format (See Col. 34 line 62-65. After encoding the unit information, VOBUs are recorded in a recorder)

- Upper unit information is a VOB in recording format (See Col. 35 line 8-10.)
- Address information comprises a navigation pack in recording format (See Fig. 6D, Co. 18 line 30-34. VOB composed of packs. Pack header is a head of the VOB includes the address information of the unit information.)

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 5, 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6148140 to Tomoyuki Okada.

Claim 5 limits claim 3 by including a unit time and constant number. Okada teaches a unit time is 0.5 seconds in Col. 3 line 52-55. Okada fails to teach a constant number which is 60. Whether the constant number as claimed is 60 or not, unless by doing so produces novel and/or unexpected results, is considered as well known design options obvious to one of ordinary skill in the art because the number of the constant provides no significant functional or patentable differences. On the same token that the

constant number is 40 or 30 or 20 would not have been patentable distinct from Okada or the claimed invention.

Claim 6 limits claim 4 by including a unit time and constant number. Okada teaches a unit time is 0.5 seconds in Col. 3 line 52-55. Okada fails to teach a constant number which is 60. Whether the constant number as claimed is 60 or not, unless by doing so produces novel and/or unexpected results, is considered as well known design options obvious to one of ordinary skill in the art because the number of the constant provides no significant functional or patentable differences. On the same token that the constant number is 40 or 30 or 20 would not have been patentable distinct from Okada or the claimed invention.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 15-18 are rejected under 35 U.S.C. 101 because claims are directed to a computer data signal embodied in a carrier wave (air).

Data structures not claimed as embodied in computer-readable media are descriptive material per se and are not statutory because they are not capable of causing functional change in the computer. See, e.g., Warmerdam, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure per se held nonstatutory). See MPEP 2106.IV.B.1.

Conclusion

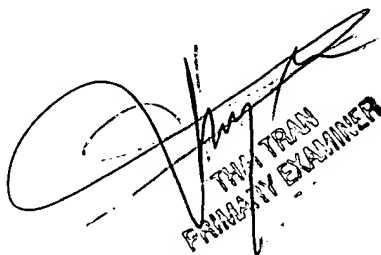
The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nigar Chowdhury whose telephone number is 571-272-8890. The examiner can normally be reached on 9 AM - 5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thai Tran can be reached on 571-272-7382. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

NIC
12/19/2005



THAI TRAN
PATENT EXAMINER